

City Objects

Challenge

- Detect people and objects at night in a dense, urban environment

Classes & Data

- Bicycles, buses, cars, motorcycles, trucks and people
- 1,000 Real Labeled Data
- 23,000 Synthetic Data
- 28,000 Domain Adapted Data
- Bounding boxes

Algorithm

- Single Shot Detector (SSD)

Takeaways

- Synthetic data proves its value to bootstrap an algorithm when no real data is available
- Synthetic data plus a small amount of real data improves performance by 44%
- Synthetic data can help even more with faster architectures, which generalize less



Cities (Classes)

